## MEMORANDUM

**TO**: George Horne, Deputy Executive Director

Ken Ammon, Deputy Executive Director

Deena Reppen, Assistant Deputy Executive Director

**FROM:** Susan Sylvester, Director, Operations and Hydro Data Management Dept.

Linda Lindstrom, Director, Restoration Sciences Dept.

Dean Powell, Deputy Director, Water Supply Management Dept.

**DATE:** May 19, 2010

**SUBJECT:** Operational Position Statement for the Week of May 18 - May 24, 2010

The U.S. Army Corps of Engineers (USACE) is responsible for managing Lake Okeechobee water levels and makes operational decisions about whether to retain water or release water based on their regulation schedule release guidance. The USACE makes this decision taking into account the best available science and data provided by its staff and a variety of partners, which includes the South Florida Water Management District (SFWMD).

 Summary of Recommendations: The SFWMD team has reviewed the Weekly Environmental Conditions for Systems Operations and the Water Supply Report dated May 18, 2010, and evaluated the overall status of the water management system.

Since May 3<sup>rd</sup>, the USACE has averaged releases from Lake Okeechobee of 4,000 cfs to the Caloosahatchee River (C-43) and 1,800 cfs to the St. Lucie (C-44). As tributary conditions have changed due to below normal rainfall over the past two weeks the LORS will likely indicate a reduction in lake releases at the end of the current 10-day pulse release.

Therefore, SFWMD staff recommendations are:

- a) For releases to the St Lucie Canal it is recommended that the USACE utilize pulse releases to achieve the LORS average of 1,170 cfs at the completion of the current 10 day pulse release as follows: Days 1 to 10: 1500, 1500, 1400, 1400, 1300, 1300, 1100, 900, 650, and 650 cfs.
- b) For releases to the Caloosahatchee River it is recommended that the USACE utilize pulse releases to achieve the LORS average of 3,000 cfs, as measured at S79 at the completion of the current 10 day pulse release as follows:

Days 1 to 10: 3500, 3500, 3500, 3000, 3000, 3000, 3000, 2500, 2500, and 2500 cfs.

The basis for these recommendations and suggested flow rates are provided in the following paragraphs. The SFWMD also understands that the USACE must consider other project purposes, limitations, and risk when determining their release decisions.

- 2. Weather: The District-wide rainfall average for May 1 18 has been 1.25 inches, -1.05 inches (54%) below average. Conditions for this week will be wetter.
- 3. Water Supply: Groundwater levels all across the District decreased a bit this past week; nevertheless, most wells are at above-average levels expected for this time of year.
- 4. Lake Okeechobee Release Status and Regulation Schedule Release Guidance: According to the USACE web site, Lake Okeechobee stage is 14.64 feet NGVD for the period ending at midnight May 17, 2010, which is 0.34 feet lower than a week ago, 0.06 feet lower than a month ago, and 4.06 feet higher than a year ago (figure 1). The current stage is 1.37 feet above the historical average for this date and 2.56 feet higher than the simulated average using the current regulation schedule

(LORS2008). Total inflows are reported as 3,171 cfs. The USACE began constant releases of 4,000 cfs to the Caloosahatchee River (C-43) and 1,800 cfs to the St. Lucie (C-44) on Monday May 3<sup>rd</sup> and switched to pulse releases on Wednesday, May 12.

- 5. Kissimmee System Water Management Recommendations: No new recommendations at this time.
- 6. Lake Okeechobee Water Management Recommendations: The ecological recommendation for Lake Okeechobee is to continue the current recession in preparation for the onset of the anticipated rainy season increase in water levels. However, the recession should not exceed one foot every 30 days to minimize potential negative impacts on inner marsh and littoral fringe communities that were recently inundated as a result of this year's wetter than usual conditions.
- 7. St. Lucie Estuary: The focus of adaptive management recommendations has shifted from the inner estuary to the outer estuary with a focus of protecting these marine environments from unfavorable salinity. It is recommended that the USACE utilize pulse releases to achieve the LORS average of 1,170 cfs at the completion of the current 10 day pulse release as follows:
  Days 1 to 10: 1500, 1500, 1400, 1400, 1300, 1300, 1100, 900, 650, and 650 cfs.
  These flows are guidelines and may be modified following adaptive management protocol.
- 8. Caloosahatchee Estuary: The focus of adaptive management recommendations has shifted from the inner estuary to the outer estuary with a focus of protecting these marine environments from unfavorable salinity. it is recommended that the USACE utilize pulse releases to achieve the LORS average of 3,000 cfs, as measured at S79 at the completion of the current 10 day pulse release as follows:

Days 1 to 10: 3500, 3500, 3500, 3000, 3000, 3000, 3000, 2500, 2500, and 2500 cfs.

These flows are guidelines and may be modified following adaptive management protocol.

9. Greater Everglades: The majority of active kite nests in 3A are found in the dryer, central region and there is concern that water levels below nests will become too shallow to deter mammalian nest predators. Most nests will remain active for at least another month and current depths below nests range between 4.7 and 11.4 inches. To prevent drying under nests, aim for a recession rate of 0.05 feet per week, although faster rates are acceptable for short durations. It is also recognized that rainfall forecast may change that recession rate rapidly and therefore no change in water releases are recommended at this time. An update of nesting in the sub-population A of Cape Sable seaside Sparrow represented by NP-205 is requested.